9:41

## AMENDMENTS TO THE CLAIMS

- (Currently Amended) A closed loop continuous emulsion polymerisation apparatus comprising
  - a circulation pump having an inlet and an outlet,
  - a reactor tube,

connecting the outlet of the circulation pump with the inlet of the circulation pump, said reactor tube being capable of receiving a cleaning pig and having at least one monomer feed, at least one water phase feed, wherein said monomer and said water phase form a polymer emulsion within the reactor tube and said polymer emulsion is recirculated by the circulation pump\_along the entire length of the reactor tube, and at least one outlet for the discharge of a portion of the polymer emulsion,

a by-pass tube which circumvents the circulation pump.

and a pig receiving station which is in parallel connection with the circulation pump or the reactor tube, said apparatus adapted to enable removal or insertion of the pig receiving station without disruption of the flow of the polymer emulsion.

- 2. (Previously Presented) The polymerisation apparatus according to claim 1, wherein the pig receiving station is integrated into the by-pass.
- 3. (Previously Presented) The polymerisation apparatus according to claim 1, wherein the reactor tube has an aperture through which the reactor tube is in fluid communication with the inlet side of the circulation pump and continues on to the outlet side of the circulation pump, the part of the reactor tube between the inlet and outlet sides of the circulation pump serving as the pig receiving station.
- 4. (Previously Presented) The polymerisation apparatus according to claim 3, wherein the aperture is a slot extending substantially in the longitudinal direction of the reactor tube.
- (Original) The polymerisation apparatus according to claim 4, wherein the width of the slot is smaller than the width of the pig.

- 6. (Original) The polymerisation apparatus according to claim 5, wherein the width of the slot increases downstream.
- 7. (Previously Presented) The polymerisation apparatus according to claim 1, wherein the reactor tube comprises a means for directing the pig into the pig receiving station.
- 8. (Original) The polymerization apparatus according to claim 1, wherein at least a substantial part of the reactor tube forms at least one helical coil.
- (Previously Presented) The polymerization apparatus according to claim 1, further comprising a pig detector for checking whether the pig is present in the pig receiving station.
- 10. (Withdrawn) A process for preparing emulsion polymer by means of the polymerisation apparatus according to claim 1.
- 11. (Withdrawn) The process according to claim 9, wherein a pig is launched at intervals ranging from 1 to 60 minutes.
- 12. (Withdrawn) The process according to claim 9, wherein a pig is launched at intervals ranging from 10 to 20 minutes.
- 13. (Currently Amended) A closed loop continuous emulsion polymerisation apparatus comprising
  - a circulation pump having a suction side and a delivery side;
  - a reactor tube which connects the delivery side of the circulation pump to the suction side of the circulation pump, wherein the reactor tube has at least one inlet for monomer feed, at least one inlet for water phase feed, and an outlet for the discharge of a polymer emulsion formed within the reactor tube from the monomer feed and water phase feed;
  - a pig for cleaning the apparatus wherein the pig is capable of circulating through the reactor tube;

a by-pass tube that circumvents the circulation pump; and

a pig receiving station which is in parallel connection with the circulation pump or the reactor tube and which is releasably engaged to the by-pass tube or the reactor tube such that the pig receiving station is capable of being disengaged from the apparatus without disruption to the flow of the polymer emulsion.

## 14. Canceled.

- 15. (New) The polymerisation apparatus according to claim 13, wherein the pig receiving station is integrated into the by-pass.
- 16. (New) The polymerisation apparatus according to claim 13, wherein the reactor tube has an aperture through which the reactor tube is in fluid communication with the inlet side of the circulation pump and continues on to the outlet side of the circulation pump, the part of the reactor tube between the inlet and outlet sides of the circulation pump serving as the pig receiving station.
- 17. (New) The polymerisation apparatus according to claim 16, wherein the aperture is a slot extending substantially in the longitudinal direction of the reactor tube.
- 18. (New) The polymerisation apparatus according to claim 17, wherein the width of the slot is smaller than the width of the pig.
- 19. (New) The polymerisation apparatus according to claim 18, wherein the width of the slot increases downstream.
- 20. (New) The polymerisation apparatus according to claim 13, wherein the reactor tube comprises a means for directing the pig into the pig receiving station.
- 21. (New) The polymerization apparatus according to claim 13, wherein at least a substantial part of the reactor tube forms at least one helical coil.

9:41

22. (New) The polymerization apparatus according to claim 13, further comprising a pig detector for checking whether the pig is present in the pig receiving station.